AMENDMENTS TO THE CLAIMS

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Currently amended) A method ~~(M)~~ to detect [[a]] at least one noise signal ~~(PSI, PS2, PS3)~~ in a digital audio signal using at least one processor, ~~(EAS), wherein~~ the method comprising:

dividing the digital audio signal ~~(EAS) is divided~~ into a plurality of successive signal sections ~~(SAS)~~;

determining, by the at least one processor, an energy content for each of the plurality of successive signal sections;

[[the]] comparing the energy ~~contents of~~ content for each of the plurality of successive signal sections ~~(SAS) are determined~~, to an energy threshold;

~~the energy contents of a signal section (SAS) are evaluated in relation to an energy threshold (ET);~~

detecting, among the plurality of successive signal sections, ~~the occurrence of~~ at least one high-energy signal section having an energy content ~~above~~ greater than the energy threshold ~~(ET), and the occurrence of~~, wherein the at least one high-energy signal section has at least one preceding signal section ~~(SAS) preceding the at least one high-energy signal section and~~ having an energy content ~~below~~ less than the energy threshold ~~(ET), and the occurrence of~~ at least one following signal section ~~(SAS) following the at least one high-energy signal section and~~ having an energy content ~~below~~ less than the energy threshold ~~(ET) are detected; and~~

counting a first quantity of the at least one preceding signal sections ~~(SAS) that precede the at least one high-energy signal section (SAS) and~~, a second quantity of the at least one high-energy signal section[[s]], and a third quantity of the at least one following signal sections ~~(SAS) that follow the high-energy signal section are counted~~; and

determining if the at least one high-energy signal section represents the at least one noise signal based, at least in part, on the first quantity, the second quantity, and the third quantity.

2. (Currently amended) [[A]] The method ~~(M) as claimed in~~ of claim 1, wherein[[:]] the energy ~~contents~~ content [[of a]] for each of the plurality of successive signal ~~section (SAS) are~~ sections is determined in accordance with the formula:

$$E = 10\log_{10}\left(\frac{1}{N}\sum_{k=1}^{N} S_k^2\right);$$

wherein S_k represents [[the]] magnitudes of signal amplitudes within each of the plurality of successive signal ~~section (SAS)~~ sections, and ~~wherein~~ N represents [[the]] a total ~~quantity~~ number of signal amplitudes within each of the plurality of successive signal ~~section (SAS)~~ sections.

3. (Currently amended) [[A]] The method ~~(M) as claimed in~~ of claim 1, ~~wherein~~ further comprising:

determining the energy threshold ~~(ET) is determined~~ continuously from the digital audio signal ~~(EAS) on the basis of~~ based, at least in part, on a histogram method ~~applied to~~ using the energy ~~contents~~ content calculated for each of the successive signal sections ~~(SAS), taking account of a quickly changing~~ a background level, and ~~with the aid of~~ a ratio between a useful-signal level and a noise level of the digital audio signal ~~(EAS)~~.

4. (Currently amended) [[A]] The method ~~(M) as claimed in~~ of claim 1, wherein a duration of each of the successive signal sections ~~(SAS) exhibit a signal-section duration (P) of~~ is between two milliseconds and ten milliseconds.

5. (Currently amended) [[A]] The method ~~(M) as claimed in~~ of claim 1, wherein a duration of each of the successive signal sections ~~(SAS) exhibits a signal-section duration (P) of~~ is five milliseconds.

6. (Currently amended) [[A]] The method ~~(M) as claimed in~~ of claim 1, wherein[[:]] it is determined that the at least one high-energy signal section represents the at least one noise signal when the first quantity is equal to or greater than 9, the second quantity is between 3 and 7, and the third quantity is equal to or greater than 30.

~~it is established whether the energy contents of l successive high-energy signal sections exceed the energy threshold (ET), wherein l lies between 3 and 7;~~

~~it is established whether the energy contents of m successive signal sections (SAS) preceding the high-energy signal sections fall below the energy threshold (ET), wherein m is equal to or greater than 9; and~~

~~it is established whether the energy contents of n successive signal sections (SAS) following the high-energy signal sections fall below the energy threshold (ET), wherein n is equal to or greater than 30.~~

7. (Currently amended) [[A]] The method ~~(M) as claimed in~~ of claim 1, ~~wherein~~ further comprising:

determining if ~~it is established whether, subsequent to high-energy signal sections, during signal sections (SAS) following these high-energy signal sections, which exhibit an energy content below the energy threshold (ET), further~~ at least one additional high-energy signal ~~sections follow~~ section follows the at least one following signal section having an energy content less than the energy threshold; ~~and~~

~~the quantity of high-energy signal sections and the quantity of signal sections (SAS) which follow the further high-energy signal sections are counted~~ wherein counting the second quantity comprises counting the at least one high-energy signal section and the at least one additional high-energy signal section.

8. (Currently amended) ~~A device (1) to process~~ An apparatus for detecting a noise signal in a digital audio signal ~~(EAS), which is equipped with noise-signal-detection means (6), which are designed to detect a noise signal (PSI, PS2, PS3) in the audio signal (EAS), wherein~~ the apparatus comprising:

~~audio-signal-subdivision means (7) , which are designed to subdivide~~ a divider circuit configured to divide the digital audio signal ~~(EAS) successive~~ into a plurality of signal sections ~~(SAS), are provided~~;

~~energy-contents determination means (8), which are designed~~ a determination circuit configured to determine the energy-~~contents successive~~ content of the plurality of signal sections ~~(SAS), are provided;~~

~~energy-contents evaluation means (12), which are designed~~ an evaluation circuit configured to evaluate the energy-~~contents~~ content of [[a]] each of the plurality of signal ~~section (SAS) in relation~~ sections relative to an energy threshold-~~(ET), are provided~~; and

~~occurrence detection means (13), which are designed~~ a detection circuit configured to detect, among the plurality of signal sections, the occurrence of:

at least one high-energy signal section having an energy content-~~above~~ greater than the energy threshold-~~(ET), and to detect the occurrence of,~~

at least one preceding signal section-~~(SAS)~~ preceding the at least one high-energy signal section and having an energy content-~~below~~ less than the energy threshold-~~(ET)~~, and ~~to recognize the occurrence of~~

at least one following signal section-~~(SAS)~~ following the at least one high-energy signal section and having an energy content-~~below~~ less than the energy threshold-~~(ET) are provided,~~; and

~~wherein counting means (11), which are designed~~ a counting circuit configured to count a first quantity of preceding signal sections-~~(SAS) that precede the at least one high-energy signal section and to count~~, a second quantity of high-energy signal sections, and-~~to count~~ a third quantity of following signal sections-~~(SAS) that follow the at least one high-energy signal section, are provided~~.

9. (Currently amended) ~~A device (1) as claimed in~~ The apparatus of claim 8, ~~wherein~~ further comprising:

~~supply means (14), which are designed~~ a supply circuit configured to supply-~~a noise-signal-free~~ an output audio signal-~~(DASO), taking account of the detected noise signal (PSI, PS2, PS3), are provided~~, wherein the output audio signal comprises less noise than the digital audio signal.

10. (Currently amended) A computer-readable medium ~~program product (27), which can be loaded directly into a memory (23) of a computer (19), and comprises wherein the~~ comprising a plurality of software code sections that, when executed by a computer, perform a method ~~(M) in accordance with claim 1 can be implemented with the computer (19) when the computer program product (27) is implemented on the computer (19)~~ comprising:

dividing a digital audio signal into a plurality of signal sections;

comparing an energy content determined for each of the plurality of signal sections to an energy threshold;

detecting, among the plurality of signal sections, at least one high-energy signal section having an energy content greater than the energy threshold, wherein the at least one high-energy signal section has at least one preceding signal section having an energy content less than the energy threshold and at least one following signal section having an energy content less than the energy threshold;

counting a first quantity of the at least one preceding signal section, a second quantity of the at least one high-energy signal section, and a third quantity of the at least one following signal section; and

determining if the at least one high-energy signal section represents at least one noise signal based, at least in part, on the first quantity, the second quantity, and the third quantity.

11. (Canceled)

12. (Canceled)

13. (New) The computer-readable medium of claim 10, wherein the energy content for each of the plurality of signal sections is determined in accordance with the formula:

$$E = 10\log_{10}\left(\frac{1}{N}\sum_{k=1}^{N} S_k^2\right);$$

wherein S_k represents magnitudes of signal amplitudes within each of the plurality of signal sections, and N represents a total number of signal amplitudes within each of the plurality of signal sections.

14. (New) The computer-readable medium of claim 10, wherein the method further comprises:

determining the energy threshold continuously from the digital audio signal based, at least in part, on a histogram method using the energy content calculated for each of the signal sections, a background level, and a ratio between a useful-signal level and a noise level of the digital audio signal.

15. (New) The computer-readable medium of claim 10, wherein a duration of each of the signal sections is between two milliseconds and ten milliseconds.

16. (New) The computer-readable medium of claim 10, wherein a duration of each of the signal sections is five milliseconds.

17. (New) The computer-readable medium of claim 10, wherein it is determined that the at least one high-energy signal section represents the at least one noise signal when the first quantity is equal to or greater than 9, the second quantity is between 3 and 7, and the third quantity is equal to or greater than 30.

18. (New) The computer-readable medium of claim 10, wherein the method further comprises:

determining if at least one additional high-energy signal section is present following the at least one following signal section having an energy content less than the energy threshold;

wherein counting the second quantity comprises counting the at least one high-energy signal section and the at least one additional high-energy signal section, if present.

19. (New) The apparatus of claim 8, wherein one or more of the divider circuit, the determination circuit, the evaluation circuit, the detection circuit, and the counting circuit are implemented by at least one programmed processor.

20. (New) The apparatus of claim 9, wherein the supply circuit is implemented by at least one programmed processor.